This service manual covers the 1986-2006 Bayou 300 2x4/4x4 Series.

Please understand that this is an older manual, some pictures may be darker than most of my manuals.

Some models may need supplemental manuals which have blue titles. Use the base manual for everything not contained in the supplement if your model or year requires a supplement.

This manual is fully searchable, just hold down the control key and the F key to search on any word.

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Quick Reference Guide

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This quick reference guide will assist you in locating a desired topic or procedure.

- Bend the pages back to match the black tab of the desired chapter number with the black tab on the edge at each table of contents page.
- Refer to the sectional table of contents for the exact pages to locate the specific topic or procedure required.

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Kawasaki

KLF300

All Terrain Vehicle

Service Manual

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PLEASE DO NOT TAMPER WITH NOISE CONTROL SYSTEM

(US Model only)

To minimize the noise emissions from this product, Kawasaki has equipped it with effective intake and exhaust silencing systems. They are designed to give optimum performance while maintaining a low noise level. Please do not remove these systems, or alter them in any which results in an increase in noise level.

This warning may apply to any of the following components or any assembly containing one or more of these components:—

Brake Shoes or Pads
Clutch Friction Material
Gaskets
Insulators

SAFETY INSTRUCTIONS

- Operate if possible out of doors or in a well ventilated place.
- Preferably use hand tools or low speed tools equipped, if necessary, with an appropriate dust extraction facility. If high speed tools are used, they should always be so equipped.
- If possible, dampen before cutting or drilling.
- Dampen dust and place it in properly closed receptacle and dispose of it safely.

LIST OF ABBREVIATIONS

A	ampere(s)	lb	pound(s)
ABDC	after bottom dead center	m	meter(s)
AC	alternating current	min	minute(s)
ATDC	after top dead center	N	newton(s)
BBDC	before bottom dead center	Pa	pascal(s)
BDC	bottom dead center	PS	horsepower
BTDC	before top dead center	psi	pound(s) per square inch
°C	degree(s) Celsius	r	revolution
DC	direct current	rpm	revolution(s) per minute
F	farad(s)	TDC	top dead center
°F	degree(s) Fahrenheit	TIR	total indicator reading
ft	foot, feet	V	volt(s)
g	gram(s)	W	watt(s)
h	hour(s)	Ω	ohm(s)
L	liter(s)		

Read OWNER'S MANUAL before operating

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Foreword

This manual is designed primarily for use by trained mechanics in a properly equipped shop. However, it contains enough detail and basic information to make it useful to the owner who desires to perform his own basic maintenance and repair work. A basic knowledge of mechanics, the proper use of tools, and workshop procedures must be understood in order to carry out maintenance and repair satisfactorily. Whenever the owner has insufficient experience or doubts his ability to do the work, all adjustments, maintenance, and repair should be carried out only by qualified mechanics.

In order to perform the work efficiently and to avoid costly mistakes, read the text, thoroughly familiarize yourself with the procedures before starting work, and then do the work carefully in a clean area. Whenever special tools or equipment are specified, do not use makeshift tools or equipment. Precision measurements can only be made if the proper instruments are used, and the use of substitute tools may adversely affect safe operation.

For the duration of your warranty period, especially, we recommend that all repairs and scheduled maintenance be performed in accordance with this service manual. Any owner maintenance or repair procedure not performed in accordance with this manual may void the warranty.

To get the longest life out of your vehicle:

- Follow the Periodic Maintenance Chart in the Service Manual.
- Be alert for problems and non-scheduled maintenance.
- Use proper tools and genuine Kawasaki vehicle parts. Special tools, gauges, and testers that are necessary when servicing Kawasaki vehicles are introduced by the Special Tool Manual. Genuine parts provided as spare parts are listed in the Parts Catalog.
- Follow the procedures in this manual carefully. Don't take shortcuts.
- Remember to keep complete records of maintenance and repair with dates and any new parts installed.

How to Use this Manual

In preparing this manual, we divided the product into its major systems. These systems became the manual's chapters. All information for a particular system from adjustment through disassembly and inspection is located in a single chapter.

The Quick Reference Guide shows you all of the product's systems and assists in locating their chapters. Each chapter in turn has its own comprehensive Table of Contents.

The Periodic Maintenance Chart is located in the General Information chapter. The chart gives a time schedule for required maintenance operations.

If you want spark plug information, for example, go to the Periodic Maintenance Chart first. The chart tells you how frequently to clean and gap the plug. Next, use the Quick Reference Guide to locate the Electrical System chapter. Then, use the Table of Contents on the first page of the chapter to find the Spark Plug section.

Whenever you see these WARNING and CAUTION symbols, heed their instructions! Always follow safe operating and maintenance practices.

WARNING

○**This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.**

CAUTION

○**This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.**

This manual contains five more symbols (in addition to WARNING and CAUTION) which will help you distinguish different types of information.

NOTE

○*This note symbol indicates points of particular interest for more efficient and convenient operation.*

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- ●Indicates a procedural step or work to be done.
- ○Indicates a procedural sub-step or how to do the work of the procedural step it follows. It also precedes the text of a WARNING, CAUTION, or NOTE.
- ★Indicates a conditional step or what action to take based on the results of the test or inspection in the procedural step or sub-step it follows.
- ☆Indicates a conditional sub-step or what action to take based upon the results of the conditional step it follows.

In most chapters an exploded view illustration of the system components follows the Table of Contents. In these illustrations you will find the instructions indicating which parts require specified tightening torque, oil, grease or a locking agent during assembly.

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1

General Information

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Before Servicing

Before starting to service a vehicle, careful reading of the applicable section is recommended to eliminate unnecessary work. Photographs, diagrams, notes, cautions, warnings, and detailed descriptions have been included wherever necessary. Nevertheless, even a detailed account has limitations, a certain amount of basic knowledge is also required for successful work.

Especially note the following:

(1) Dirt

Before removal and disassembly, clean the vehicle. Any dirt entering the engine or other parts will work as an abrasive and shorten the life of the vehicle. For the same reason, before installing a new part, clean off any dust or metal filings.

(2) Battery Ground

Remove the ground (–) lead from the battery before performing any disassembly operations on the vehicle. This prevents:

(a) the possibility of accidentally turning the engine over while partially disassembled.
(b) sparks at electrical connections which will occur when they are disconnected.
(c) damage to electrical parts.

(3) Tightening Sequence

Generally, when installing a part with several bolts, nuts, or screws, start them all in their holes and tighten them to a snug fit. Then tighten them evenly in a cross pattern. This is to avoid distortion of the part and/or causing gas or oil leakage. Conversely when loosening the bolts, nuts, or screws, first loosen all of them by about a quarter of turn and then remove them.

Where there is a tightening sequence indication in this Service Manual, the bolts, nuts, or screws must be tightened in the order and method indicated.

(4) Torque

When torque values are given in this Service Manual, use them. Either too little or too much torque may lead to serious damage. Use a good quality, reliable torque wrench.

(5) Force

Common sense should dictate how much force is necessary in assembly and disassembly. If a part seems especially difficult to remove or install, stop and examine what may be causing the problem. Whenever tapping is necessary, tap lightly using a wooden or plastic-faced mallet. Use an impact driver for screws (particularly for the removal of screws held by a locking agent) in order to avoid damaging the screw heads.

(6) Edges

Watch for sharp edges, especially during major engine disassembly and assembly. Protect your hands with gloves or a piece of thick cloth when lifting the engine or turning it over.

(7) High-Flash Point Solvent

A high-flash point solvent is recommended to reduce fire danger. A commercial solvent commonly available in North America is Stoddard solvent (generic name). Always follow manufacturer and container directions regarding the use of any solvent.

(8) Gasket, O-Ring

Do not reuse a gasket or O-ring once it has been in service. The mating surfaces around the gasket should be free of foreign matter and perfectly smooth to avoid oil or compression leaks.

(9) Liquid Gasket, Non-Permanent Locking Agent

Follow manufacturer's directions for cleaning and preparing surfaces where these compounds will be used. Apply sparingly. Excessive amounts may block engine oil passages and cause serious damage. An example of a non-permanent locking agent commonly available in North America is Loctite Lock'n Seal (Blue).

(10) Press

A part installed using a press or driver, such as a wheel bearing, should first be coated with oil on its outer or inner circumference so that it will go into place smoothly.

(11) Ball Bearing

When installing a ball bearing, the bearing race which is affected by friction should be pushed by a suitable driver. This prevents severe stress on the balls and races, and prevents races and balls from being dented. Press a ball bearing until it stops at the stop in the hole or on the shaft.

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(12) Oil Seal and Grease Seal

Replace any oil or grease seals that were removed with new ones, as removal generally damages seals.

When pressing in a seal which has manufacturer's marks, press it in with the marks facing out. Seals should be pressed into place using a suitable driver, which contacts evenly with the side of seal, until the face of the seal is even with the end of the hole.

(13) Seal Guide

A seal guide is required for certain oil or grease seals during installation to avoid damage to the seal lips. Before a shaft passes through a seal, apply a little high temperature grease on the lips to reduce rubber to metal friction.

(14) Circlip, Retaining Ring

Replace any circlips and retaining rings that were removed with new ones, as removal weakens and deforms them. When installing circlips and retaining rings, take care to compress or expand them only enough to install them and no more.

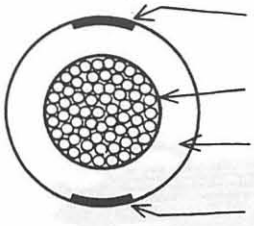
(15) Lubrication

Engine wear is generally at its maximum while the engine is warming up and before all the rubbing surfaces have an adequate lubricative film. During assembly, oil or grease (whichever is more suitable) should be applied to any rubbing surface which has lost its lubricative film. Old grease and dirty oil should be cleaned off. Deteriorated grease has lost its lubricative quality and may contain abrasive foreign particles.

Don't use just any oil or grease. Some oils and greases in particular should be used only in certain applications and may be harmful if used in an application for which they are not intended. This manual makes reference to molybdenum disulfide grease (MoS_2) in the assembly of certain engine and chassis parts. Always check manufacturer recommendations before using such special lubricants.

(16) Electrical Wires

All the electrical wires are either single-color or two-color and, with only a few exceptions, must be connected to wires of the same color. On any of the two-color wires there is a greater amount of one color and a lesser amount of a second color, so a two-color wire is identified by first the primary color and then the secondary color. For example, a yellow wire with thin red stripes is referred to as a "yellow/red" wire; it would be a "red/yellow" wire if the colors were reversed to make red the main color.

Wire (cross-section)	Name of Wire Color
	Yellow/red

(17) Replacement Parts

When there is a replacement instruction, replace these parts with new ones every time they are removed. These replacement parts will be damaged or lose their original function once removed.

(18) Inspection

When parts have been disassembled, visually inspect these parts for the following conditions or other damage. If there is any doubt as to the condition of them, replace them with new ones.

Abrasion	Crack	Hardening	Warp
Bent	Dent	Scratch	Wear
Color change	Deterioration	Seizure	

(19) Specifications

Specification terms are defined as follows.

"Standards" show dimensions or performances which brand-new parts or systems have.

"Service limits" indicate the usable limits. If the measurement shows excessive wear or deteriorated performance, replace the damaged parts.

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Model Identification

KLF300-A1 Left Side View:

KLF300-A1 Right Side View:

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KLF300-A2 Left Side View

KLF300-A2 Right Side View

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General Specifications

Items			KLF300-A1, A2
Dimensions:			
Overall length			1,850 mm
Overall width			1,100 mm
Overall height			1,045 mm
Wheelbase			1,200 mm
Ground clearance			195 mm
Seat height			750 mm
Dry weight			226 kg, Ⓤ Ⓒ 223 kg
Curb weight:	Front		109.5 kg, Ⓤ Ⓒ 108.5 kg
	Rear		126.5 kg, Ⓤ Ⓒ 124.5 kg
Fuel tank capacity			8.2 L
Performance:			
Minimum turning radius			3.0 m (Locked axle mode) 2.6 m (Differential mode)
Engine:			
Type			4-stroke, SOHC, 1-cylinder
Cooling system			Air cooled
Bore and stroke			76.0 x 64.0 mm
Displacement			290 mL
Compression ratio			8.6
Maximum horsepower			15.4 kW (21 PS) @7,000 r/min (rpm), Ⓤ Ⓒ –
Maximum torque			22.6 N-m (2.3 kg-m, 16.6 ft-lb) @6,000 r/min (rpm), Ⓤ Ⓒ –
Carburetion system			Carburetor, Keihin CVK32
Starting system			Electric starter
Ignition system			Battery and coil (Transistorized)
Timing advance			Electronically advanced
Ignition timing			From 10° BTDC @1,300 r/min (rpm) to 40° BTDC @4,000 r/min (rpm)
Spark plug			NGK B8ES, Ⓒ Ⓑ BR8ES
Valve timing:	Inlet	Open	27° BTDC
		Close	65° ABDC
		Duration	272°
	Exhaust	Open	62° BBDC
		Close	30° ATDC
		Duration	272°
Lubrication system			Forced lubrication (wet sump)
Engine oil:	Grade		SE or SF class
	Viscosity		SAE 10W-30, 10W-40, 10W-50, 20W-40, 20W-50
	Capacity		1.7 L

(Continued on next page.)

Ⓑ : U.K. Models Ⓒ : Canadian Models Ⓤ : U.S. Models

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Items			KLF300-A1, A2
Drive Train:			
Primary reduction system:		Type	Gear
		Reduction ratio	2.888 (78/27)
Clutch type		Primary	Auto centrifugal, wet
		Secondary	Auto multi disc, wet
Transmission:	Type		5-speed plus reverse, constant mesh, return shift
	Gear ratios:	1st	3.090 (34/11)
		2nd	1.928 (27/14)
		3rd	1.368 (29/19)
		4th	1.000 (23/23)
		5th	0.769 (20/26)
		Reverse	3.072 (26/11 x 26/20)
Final drive system:		Type	Shaft
		Reduction ratio	4.886 (20/16 x 43/11)
Overall drive ratio			10.858 @Top gear
Final gear case oil:		Type	API GL-5 Hypoid gear oil SAE 90 (above 5°C, 41°F) or SAE 80 (below 5°C, 41°F)
		Capacity	0.3 L
Frame:			
Type			Double tubular
Caster (rake angle)			4°
Camber			0.8° @1G
Trail			17 mm
Tread			830 mm
Front tire:	Type		Tubeless
	Size		22 x 9.00-10
Rear tire:	Type		Tubeless
	Size		24 x 11.00-10
Suspension:	Front	Type	Double wishbone-link
		Wheel travel	115 mm
	Rear	Type	Torque tube-link
		Wheel travel	120 mm
Brake type:	Front		Drum (Hydraulic)
	Rear		Drum (Mechanical)
Electrical Equipment:			
Battery			12 V 19 Ah
Headlight:	Type		Semi-sealed beam
	Bulb		12 V 60 W
Taillight			12 V 8 W x 2
Alternator:	Type		Three-phase AC
	Rated output		23.5 A @9,000 r/min (rpm), 14 V
Voltage regulator: Type			Short-circuit

Specifications are subject to change without notice, and may not apply to every country.

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Torque and Locking Agent

The following tables list the tightening torque for the major fasteners requiring use of a non-permanent locking agent or liquid gasket.

Letter used in the "Remarks" column means:
L : Apply a non-permanent locking agent to the threads.
O : Apply an oil to the threads and seated surface.
S : Tighten the fasteners following the specified sequence.
St : Stake the fasteners to prevent loosening.

Use the basic torque table below for only the bolts and nuts which do not require a specific torque value. All of the values are for use with dry solvent-cleaned threads.

Basic Torque for General Fasteners

Thread dia. (mm)	Torque		
	N-m	kg-m	ft-lb
5	3.4 – 4.9	0.35 – 0.50	30 – 43 in-lb
6	5.9 – 7.8	0.60 – 0.80	52 – 69 in-lb
8	14 – 19	1.4 – 1.9	10.0 – 13.5
10	25 – 34	2.6 – 3.5	19.0 – 25
12	44 – 61	4.5 – 6.2	33 – 45
14	73 – 98	7.4 – 10.0	54 – 72
16	115 – 155	11.5 – 16.0	83 – 115
18	165 – 225	17.0 – 23	125 – 165
20	225 – 325	23 – 33	165 – 240

Fastener	Torque			Remarks
	N-m	kg-m	ft-lb	
Engine Top End:				
Cylinder Head Bolts: 6 mm	12	1.2	104 in-lb	S
8 mm	29	3.0	22	S
Cylinder Bolt	12	1.2	104 in-lb	
Valve Clearance Adjusting Screw Locknuts	12	1.2	104 in-lb	
Camshaft Sprocket Bolt	41	4.2	30	
Camshaft Chain Guide Pivot Bolt	9.8	1.0	87 in-lb	
Engine Left Side:				
Starter Clutch Allen Bolts	49	5.0	36	L
Engine Right Side:				
Oil Drain Plug	29	3.0	22	
Primary Clutch Hub Nut	125	13.0	94	O
Secondary Clutch Hub Nut	78	8.0	58	O
Secondary Clutch Spring Bolts	12	1.2	104 in-lb	
Engine Removal/Installation:				
Engine Mounting Bolts: 8 mm	25	2.5	18.0	
10 mm	34	3.5	25	
Engine Mounting Bracket Bolts	25	2.5	18.0	
Engine Bottom End/Transmission:				
Oil Pipe Banjo Bolts	20	2.0	14.5	
Shift Drum Stopper Bolt	12	1.2	104 in-lb	
Shift Drum Pin Plate Bolt	12	1.2	104 in-lb	
Shift Shaft Return Spring Pin	17	1.7	12.0	L
Clutch Release Cam Pin	17	1.7	12.0	L
Balancer Gear Nut	83	8.5	61	O
Balancer Drive Gear and Oil Pump Drive Gear Nut	78	8.0	58	O
Wheels/Tires:				
Wheel Nuts	34	3.5	25	
Front Hub Nuts	34	3.5	25	

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Fastener	Torque			Remarks
	N-m	kg-m	ft-lb	
Final Drive:				
Front Gear Case Bolts (8 mm)	25	2.5	18.0	
Output Shaft LH Bearing Housing Bolts	12	1.2	104 in-lb	
LH Bearing Holder	98	10.0	72	St
Drive Gear Nut: 14 mm (when 16 mm)	88 (93)	9.0(9.5)	65 (69)	O
Driven Gear Nut	78	8.0	58	O
Driven Gear Shaft Oil Seal Housing Nuts	25	2.5	18.0	
Front Gear Case Plug (Odometer Gear Holder: Option)	20	2.0	14.5	
Propeller Shaft Housing Nuts	25	2.5	18.0	
Axle Shaft Pipe Bolts	20	2.0	14.5	
Pinion Gear Nut	78	8.0	58	O, St
Ring Gear and Differential Gear Housing Bolts	29	3.0	22	L
Final Gear Case Cover Bolts	25	2.5	18.0	
Final Gear Case Filler Cap	29	3.0	22	
Final Gear Case Drain Plug	20	2.0	14.5	
Differential Shift Fork Holder Screws	6.9	0.70	61 in-lb	
Brakes:				
Master Cylinder Clamp Bolts	11	1.1	95 in-lb	S
Brake Lever Pivot Nut	5.9	0.60	52 in-lb	
Wheel Cylinder Bolts	7.8	0.80	69 in-lb	
Shoe Adjuster Bolts	7.8	0.80	69 in-lb	
Brake Panel Mounting Bolts:				
Front	20	2.0	14.5	
Rear	29	3.0	22	
Rear Axle Nuts	145	15.0	110	
Brake Hose Banjo Bolts	25	2.5	18.0	
Brake Pipe Nipple	20	2.0	14.5	
Brake Pedal Nut	29	3.0	22	
Suspension:				
Shock Absorber Mounting Bolts	34	3.5	25	
Suspension Arm Pivot Bolts: 10 mm	34	3.5	25	
12 mm	88	9.0	65	
Steering:				
Handlebar Holder Bolts	20	2.0	14.5	S
Stem Clamp Allen Bolts	20	2.0	14.5	
Stem Bottom End Nut	29	3.0	22	
Stem Bearing Housing Bolts	20	2.0	14.5	
Tie-rod End Nuts	41	4.2	30	
Tie-rod Adjusting Sleeve Locknuts	29	3.0	22	
Knuckle Arm Pivot Nuts	41	4.2	30	
Electrical System:				
Alternator Rotor Bolt	59	6.0	43	
Spark Plug	27	2.8	20	
Neutral and Reverse Indicator Switch Mounting Screws	—	—	—	L

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Periodic Maintenance Chart

The scheduled maintenance must be done in accordance with this chart to keep the vehicle in good running condition. **The first service is vitally important and must not be neglected.**

• = Clean, adjust, lubricate, tighten, or replace parts as necessary.	First Service	Regular Service				
	After 10 hrs. of use	Every 10 days of use	Every 30 days of use	Every 90 days of use	Every year of use	
Chassis:						
Brake adjustment — check*	•	•				
Brake wear — check*	•	•				
Brake fluid level — check			•			
Brake fluid — change					•	
Master cylinder cup and dust seal — replace					2 years	
Wheel cylinder piston seal and dust seal — replace					2 years	
Brake hose — replace					2 years	
Cable adjustment*	•	•				
Steering play — check	•			•		
Final gear case oil — change*	•				•	
General lubrication*			•			
Bolts and nuts — tighten	•	•				
Battery — check	•		•			
Engine:						
Clutch adjustment*	•	•				
Valve clearance — check	•			•		
Fuel system cleanliness — check*	•			•		
Air cleaner — service*	•	•				
Engine oil — change*	•			•		
Oil filter — change*	•			•		
Spark plug — clean and gap	•			•		
Spark arrester — clean					•	

*Service more frequently when operated in mud, dust, or other harsh riding conditions.

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Fuel System

2

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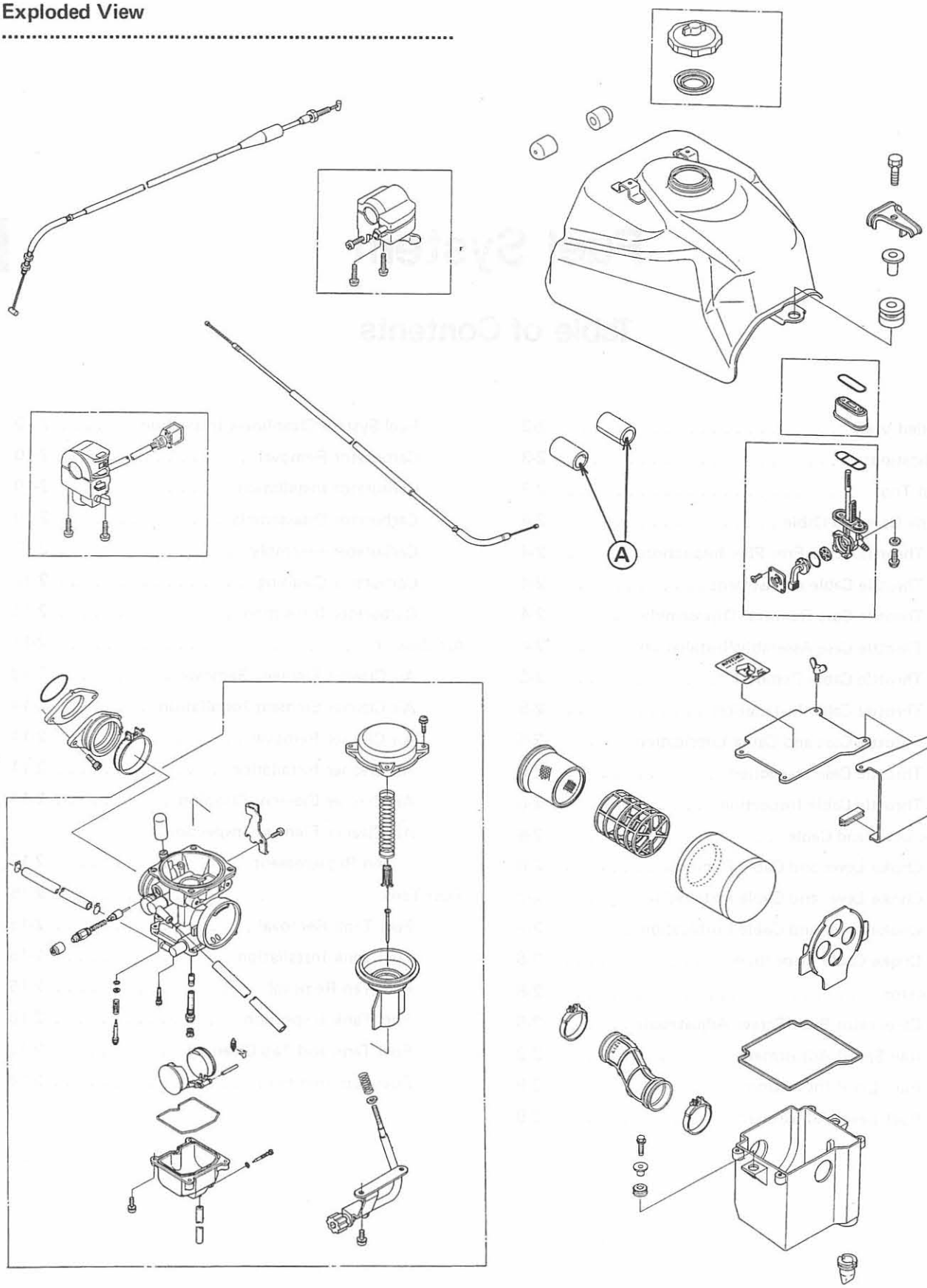
Exploded View



A : Apply adhesive.

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Specifications

Item		Standard
Throttle Lever Free Play		2 – 3 mm
Carburetor:	Make/Type	Keihin/CVK32
	Main Jet (Option)	#130 (#125, 128, 132, 135)
	Main Air Jet	#100
	Jet Needle	N27Q
	Needle Jet	#6
	Pilot Jet (Option)	#38 (#35, 40)
	Pilot Air Jet	#140
	Pilot Screw	$2^1/_8$ turns out
	Starter Jet (Option)	#55 (#58, 60)
	Service Fuel Level (from the bottom edge of carburetor body)	0.5 mm below – 1.5 mm above
	Float Height	17.0 ±2 mm
Air Cleaner Element Oil:		
	Grade	SE class
	Viscosity	SAE30

Special Tool

Along with common hand tools, the following more specialized tool is required for complete fuel system servicing.

Fuel Level Gauge: 57001-1017

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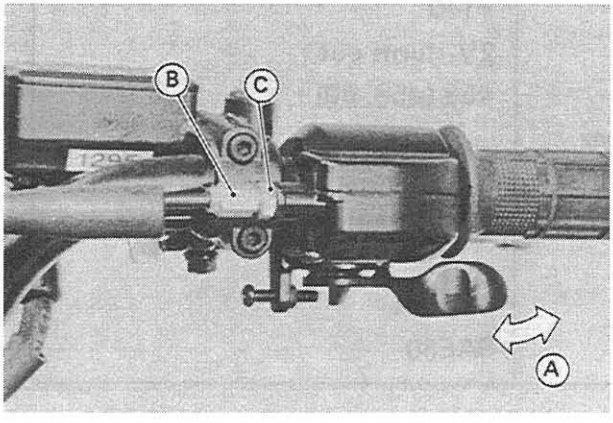
Throttle Case and Cable

Throttle Lever Free Play Inspection

●Check throttle lever free play.
★If free play is not within specifications, adjust the throttle cable (see Throttle Cable Adjustment).

Throttle Lever Free Play

Standard: 2 – 3 mm



A. Throttle Lever Free Play
B. Adjuster
C. Locknut

Throttle Cable Adjustment

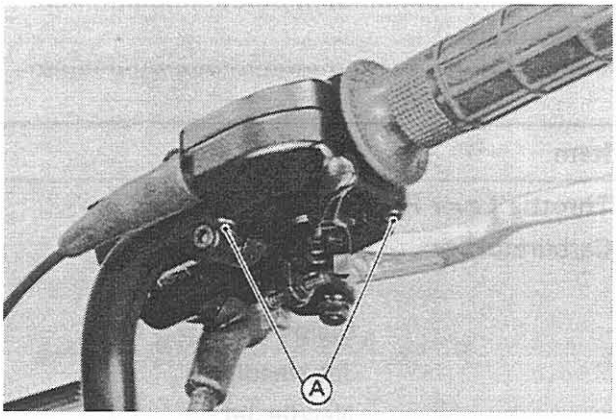
●Slide the cable adjuster dust cover out of place.
●Turn the adjuster until throttle lever free play is correct. Turning the adjuster "out" (lengthening the adjuster) will reduce free play.
●Slide back the dust cover.

NOTE

○*If the throttle cable cannot be adjusted by using the adjuster at the throttle case, use the adjuster at the carburetor. Do not forget to securely tighten the adjuster mounting nuts.*

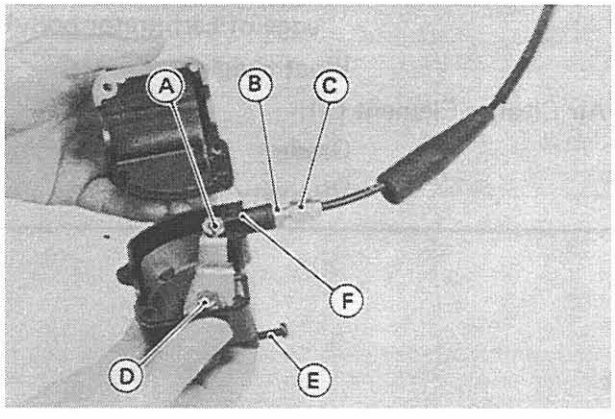
Throttle Case Removal/Disassembly

●Remove the throttle case.
○Remove the throttle case screws and pull the case open.
○Slide the cable adjuster dust cover out of place, and take off the grommet.



A. Throttle Case Screws

○Pull the cable tip from the throttle lever catch.
○Loosen the locknut and unscrew the adjuster.



A. Cable Tip
B. Locknut
C. Adjuster
D. Throttle Lever Bolt
E. Limiter Screw
F. Grommet

●Disassemble the throttle case.
○Remove the throttle lever bolt, lockwasher, and flat washer, and lift the throttle lever and return spring from the case. The control lever pivot bushing comes off with the lever.
○Loosen the locknut and unscrew the throttle limiter screw.
○Pull the throttle control lever out of the case.

Throttle Case Assembly/Installation

●Throttle case assembly/installation is the reverse of removal/disassembly. Note the following.
●Lubricate the throttle case and cable before assembly/installation (see Throttle Case and Cable Lubrication).
●Be certain that the return spring is correctly installed on the throttle lever.

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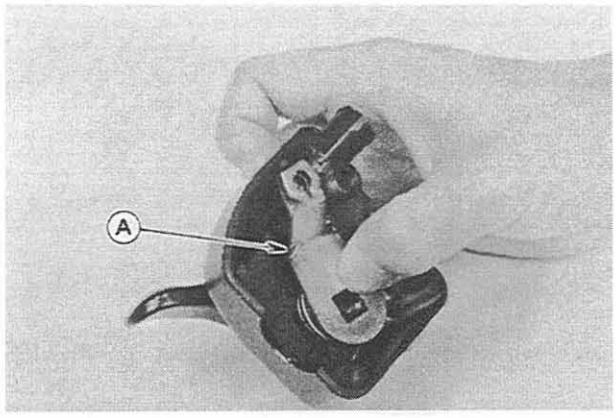


A. Return Spring Hook

- Tighten the throttle lever bolt to 6.9 N-m (0.7 kg-m, 61 in-lb) of torque.
- Swing the throttle control lever so that the carburetor throttle valve is fully open. Turn the throttle limiter screw until it is spaced about 1 mm away from the throttle lever stop.

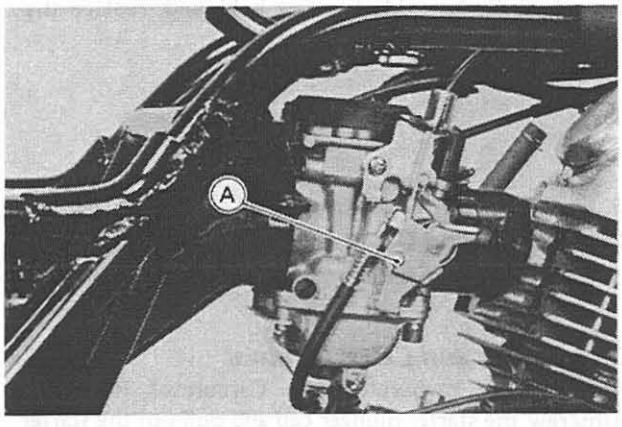
WARNING

Operation with an improperly assembled throttle case could result in an unsafe riding condition.

- Adjust the throttle cable (see Throttle Cable Adjustment).

Throttle Cable Removal

- Remove the front fender (see Front Fender Removal in the Frame chapter).
- Remove and disassemble the throttle case to free the upper end of the cable from the case (see Throttle Case Removal/Disassembly).
- Slip the cable lower end out of the pulley.

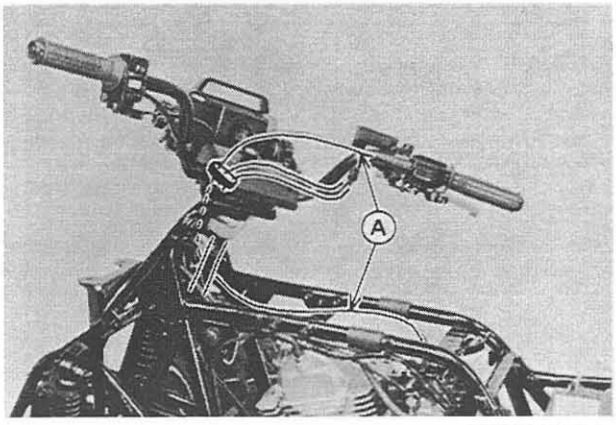


A. Cable End

- Loosen the mounting nuts at the cable lower end adjuster and free the cable from the bracket.
- Note cable routing for proper installation, and pull the cable from the vehicle.

Throttle Cable Installation

- Throttle cable installation is the reverse of removal. Note the following.
- Lubricate the throttle cable before installation (see Throttle Case and Cable Lubrication).
- Route the cable as shown.



A. Throttle Cable

WARNING

Operation with an improperly adjusted, incorrectly routed, or damaged cable could result in an unsafe riding condition.

- Adjust the throttle cable (see Throttle Cable Adjustment).

Throttle Case and Cable Lubrication

Whenever the throttle case is disassembled, or in accordance with the Periodic Maintenance Chart, perform the following.

- Apply a thin coating of multi-purpose grease to the throttle control lever pivot area and the throttle cable ends.

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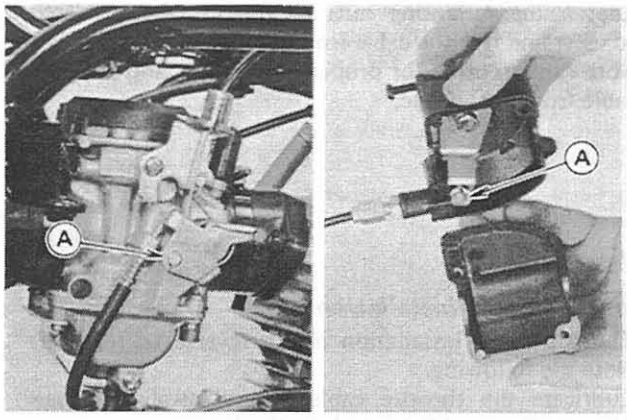
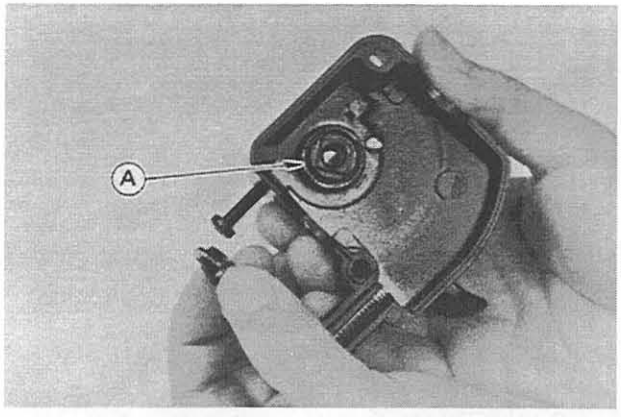


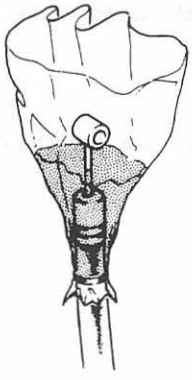
A. Apply grease.



A. Apply grease.

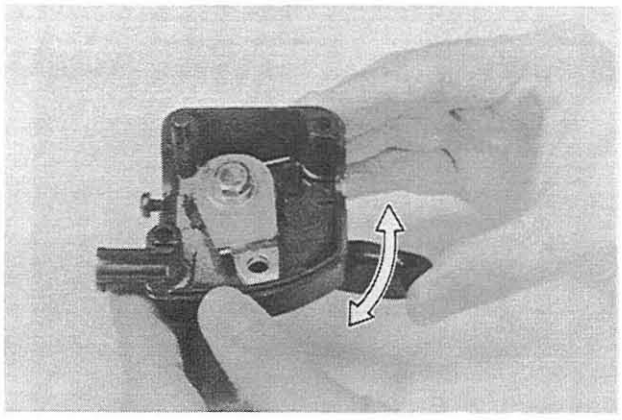
●Lubricate the throttle cable by seeping the oil between the cable and cable housing.

Cable Lubrication



Throttle Case Inspection

●With the throttle cable disconnected from the throttle lever, the lever should move freely and return smoothly by spring.

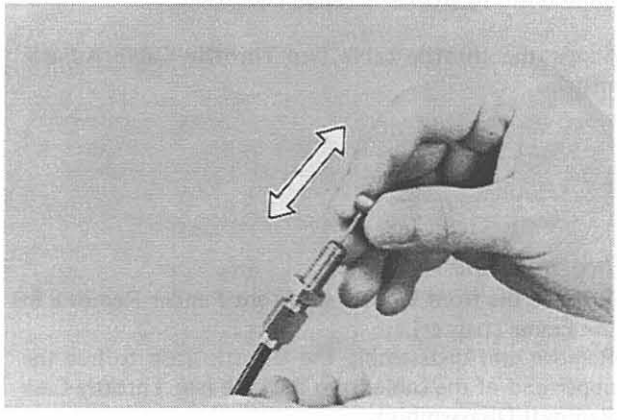


★If the lever bends, disassemble the throttle case, and clean and iubricate the throttle case (see Throttle Case and Cable Lubrication).

●Examine the lever and case for cracks. Replace the case assembly if it is cracked.

Throttle Cable Inspection

●With the throttle cable disconnected at the both ends, the cable should move freely within the cable housing.



★If cable movement is not free after lubrication (see Throttle Case and Cable Lubrication), if the cable is frayed, or if the cable housing is kinked, replace the cable.

Choke Lever and Cable

Choke Lever and Cable Removal

●Remove the carburetor (see Carburetor Removal).

●Unscrew the starter plunger cap and pull out the starter plunger.

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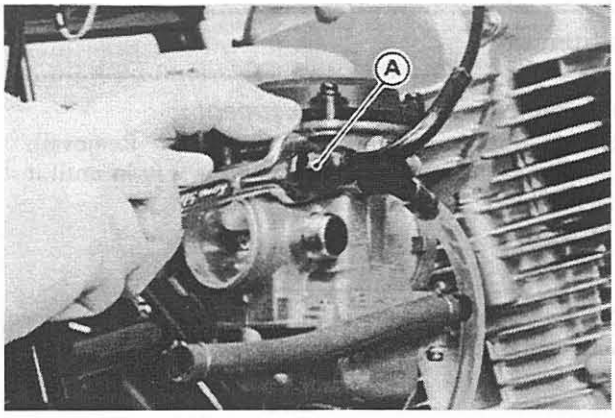
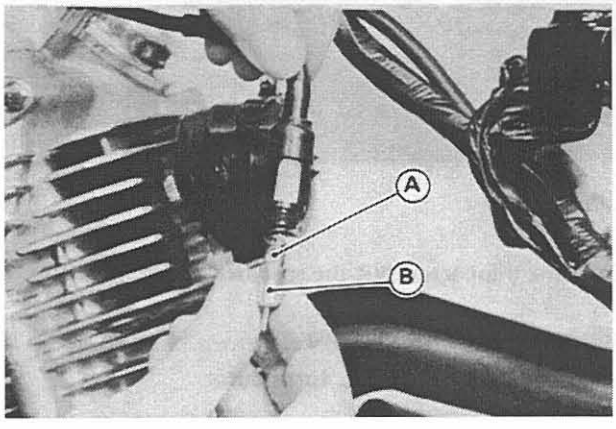


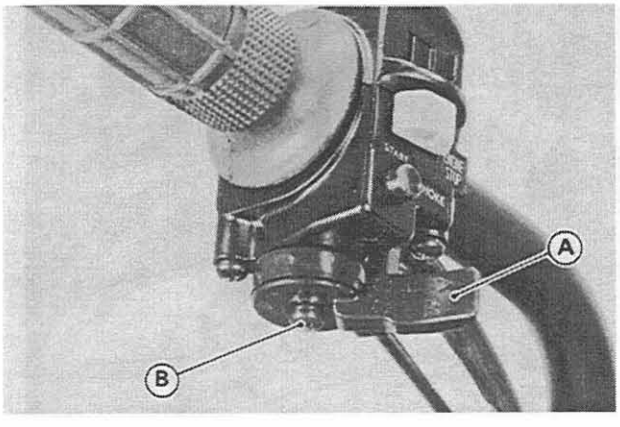
A. Starter Plunger Cap

- Hold the starter plunger spring compressed, and free the choke cable lower end from the plunger.



A. Cable End B. Starter Plunger

- Unscrew the choke lever mounting screw and take off the lockwasher and flat washer.

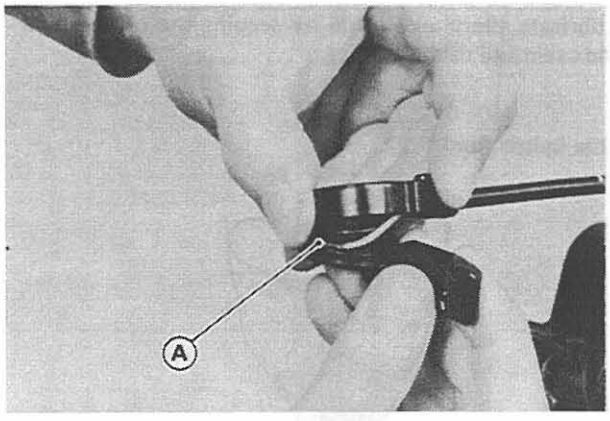


A. Choke Lever B. Lever Mounting Screw

- Pull the choke lever off the housing, and free the choke cable upper end from the lever. There is the wave washer between the lever and the housing.
- Note the choke cable routing for proper installation, and pull the cable from the vehicle.

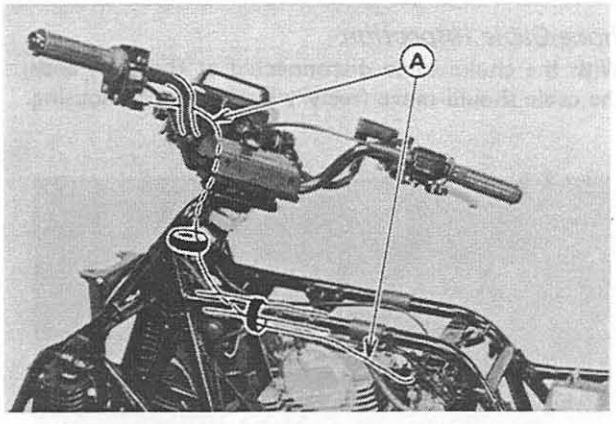
Choke Lever and Cable Installation

- Choke cable installation is the reverse of removal. Note the following.
- Lubricate the choke cable before installation (see Choke Cable Lubrication). Do not lubricate the choke lever.
- Fit the choke cable upper end to the catch on the choke lever as shown.



A. Choke Cable Upper End

- Route the choke cable as shown.



A. Choke Cable

Choke Lever and Cable Lubrication

Whenever the choke cable removed, lubricate the choke cable as follows and do not lubricate the choke lever : wave washer between the lever and the housing.

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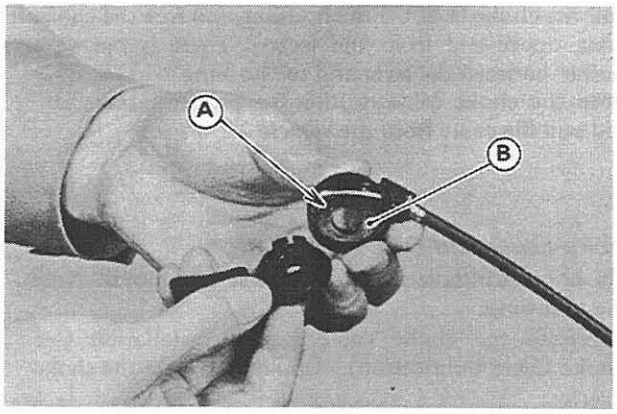
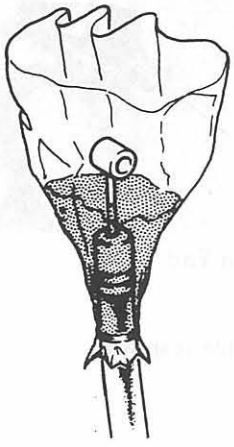


A. Do not grease. B. Wave Washer

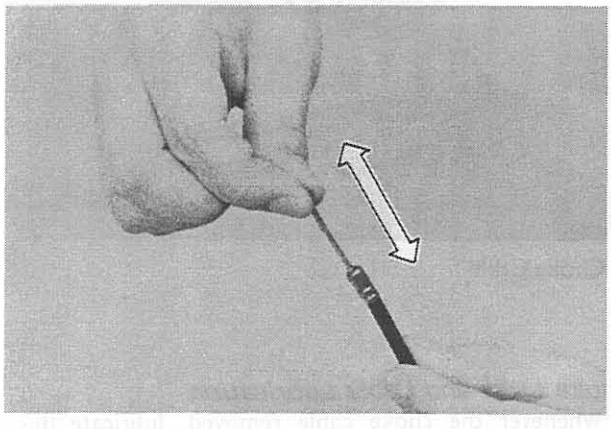
●Lubricate the choke cable by seeping the oil between the cable and cable housing.

Cable Lubrication



Choke Cable Inspection

●With the choke cable disconnected at the both ends, the cable should move freely within the cable housing.



★If cable movement is not free after lubricating (see Choke Cable Lubrication), if the cable is frayed, or if the cable housing is kinked, replaced the cable.

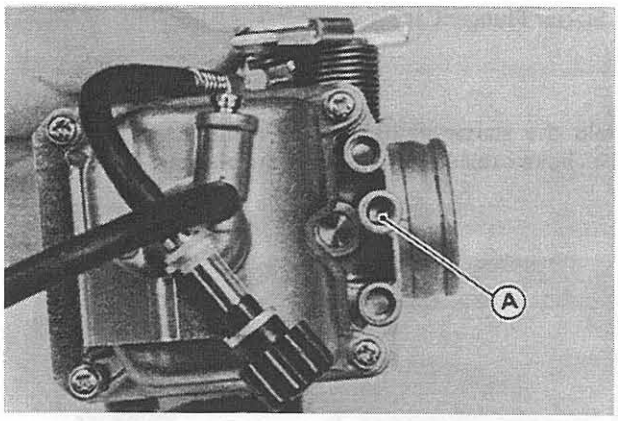
Carburetor

Carburetor Pilot Screw Adjustment

●Remove the carburetor (see Carburetor Removal).
●Turn the carburetor pilot screw all the way in until it seats lightly.

CAUTION

○**Do not overtighten the pilot screw or the carburetor body will be damaged and require replacement.**



A. Pilot Screw

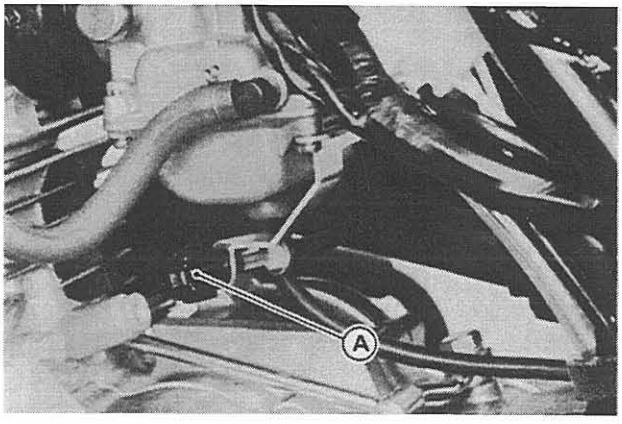
●Back the pilot screw out the specified number of turns.

Carburetor Pilot Screw Setting

Standard: $2\frac{1}{8}$ turns out

Idle Speed Adjustment

●Adjust the pilot screw if necessary (see Carburetor Pilot Screw Adjustment).
●Start the engine and warm it up thoroughly.
●Turn the idle adjusting screw to obtain the slowest smooth idle speed.



A. Idle Adjusting Screw

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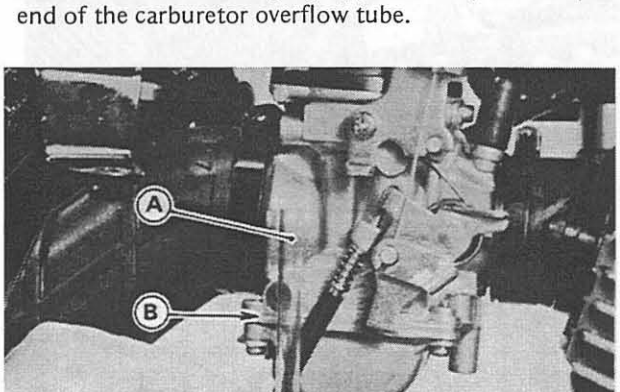
Fuel Level Inspection

WARNING

○**Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.**

- Park the vehicle on a level surface.
- Connect the fuel level gauge (special tool) to the open end of the carburetor overflow tube.



A. Fuel Level Gauge: 57001-1017
B. Carburetor body bottom edge
C. Drain Plug

- Hold the gauge vertically against the side of the carburetor body so that the "zero" line is several millimeters higher than the bottom edge of the carburetor body.
- Turn the fuel tap to the ON position to feed fuel to the carburetor and gauge, then turn out the carburetor drain plug a few turns.
- Wait until the fuel level in the gauge settle.
- Keeping the gauge vertical, slowly lower the gauge until the "zero" line is even with the bottom edge of the carburetor body.

NOTE

○*Do not lower the "zero" line below the bottom edge of the carburetor body. If the gauge is lowered and then raise it again, the fuel level measured shows somewhat higher than the actual fuel level. If the gauge is lowered too far, dump the fuel out of it into a suitable container and start the procedure over again.*

- Read the fuel level in the gauge and compare it to the specification.
- Tighten the drain plug and remove the fuel level gauge.

★If the fuel level is incorrect, adjust it (see Fuel Level Adjustment).

Fuel Level

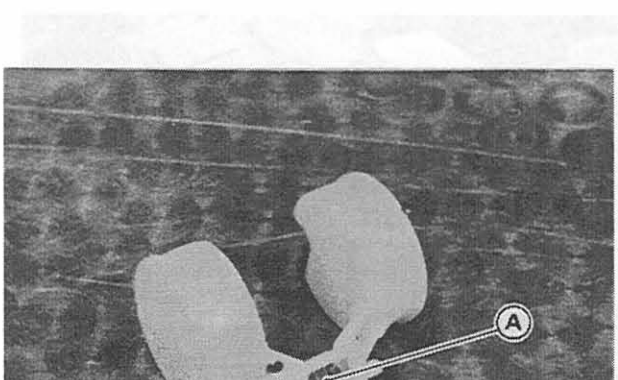
0.5 ±1 mm above the bottom edge of the carburetor body

Fuel Level Adjustment

- Remove the carburetor (see Carburetor Removal).
- Drain the carburetor into a suitable container.
- Remove the float bowl by taking out the screws with lockwashers.
- Slide out the pivot pin and remove the float.
- Bend the tang on the float arm very slighty to change the float height. Increasing the float height lowers the fuel level and decreasing the float height raises the fuel level.

Float Height

Standard: **17.0 mm**

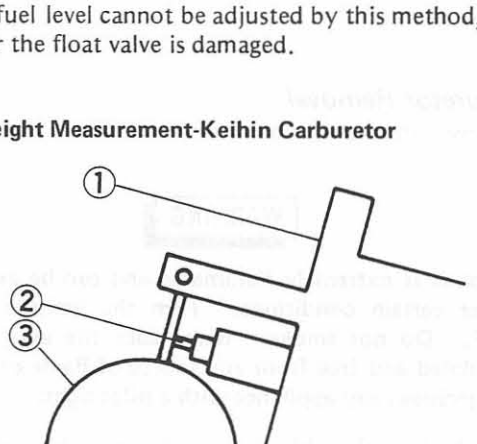


A. Tang

- Assemble the carburetor, install it on the vehicle, and recheck the fuel level.

★If the fuel level cannot be adjusted by this method, the float or the float valve is damaged.

Float Height Measurement-Keihin Carburetor



1. Float bowl mating surface
2. Float valve needle rod (contacted but unloaded)
3. Float

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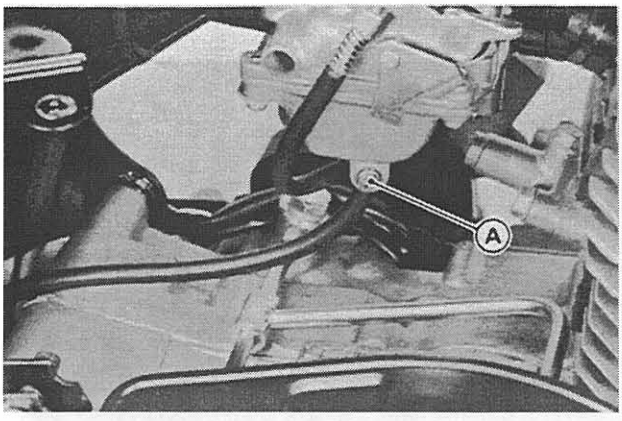
Fuel System Cleanliness Inspection

WARNING

○**Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.**

- Run the lower end of the carburetor overflow tube to a suitable container.
- Turn out the carburetor drain plug a few turns and drain the fuel system.



A. Drain Plug

- Check to see if water or dirt comes out.
- Tighten the drain plug.

★If any water or dirt appears during the above inspection, clean the fuel system (see Carburetor Cleaning and Fuel Tank and Tap Cleaning).

Carburetor Removal

- Remove the fuel tank (see Fuel Tank Removal).

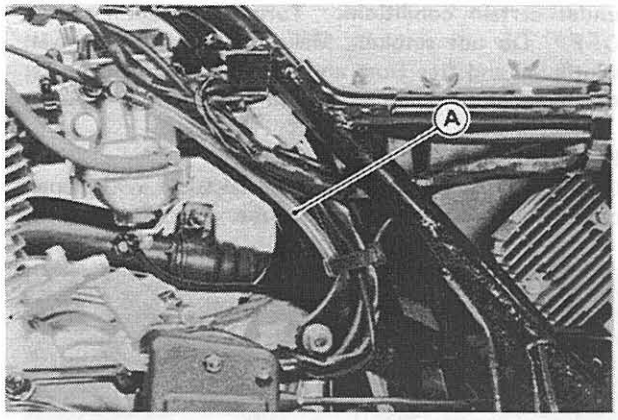
WARNING

○**Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.**

- Slip the throttle cable lower end out of the carburetor pulley (see Throttle Cable Removal).
- Loosen the clamps on the carburetor holder and the air cleaner duct.
- Pull the air cleaner duct off the mouth of the carburetor.
- Pull the carburetor out the carburetor holder.
- Unscrew the starter plunger cap and free the lower end of the carburetor choke cable from the carburetor (see Choke Cable Removal).

Carburetor Installation

- Carburetor Installation is the reverse of removal. Note the following.
- Route the carburetor vent hose as shown.



A. Carburetor Vent Hose

- Check fuel leakage from the carburetor.

WARNING

○**Fuel spilled from the carburetor is hazardous.**

- Adjust the pilot screw (see Carburetor Pilot Screw Adjustment).
- If the carburetor has been disassembled, or if there is some other reason that the fuel level may be incorrect, inspect the fuel level (see Carburetor Fuel Level Inspection).
- Adjust the idle speed (see Idle Speed Adjustment).
- Adjust the throttle cable (see Throttle Cable Adjustment).

Carburetor Disassembly

- Remove the carburetor (see Carburetor Removal).
- Remove the carburetor top end as follows.
- Remove the upper chamber cover screws and take off the cover and spring.
- Pull out the vacuum piston with the diaphragm.

CAUTION

○**During carburetor disassembly, be careful not to damage the diaphragm. Never use a sharp edge to remove diaphragm.**

- Slide the jet needle out of the vacuum piston from the bottom. It will come out with a spring seat.